

Tippecanoe County 2009 Trending Narrative

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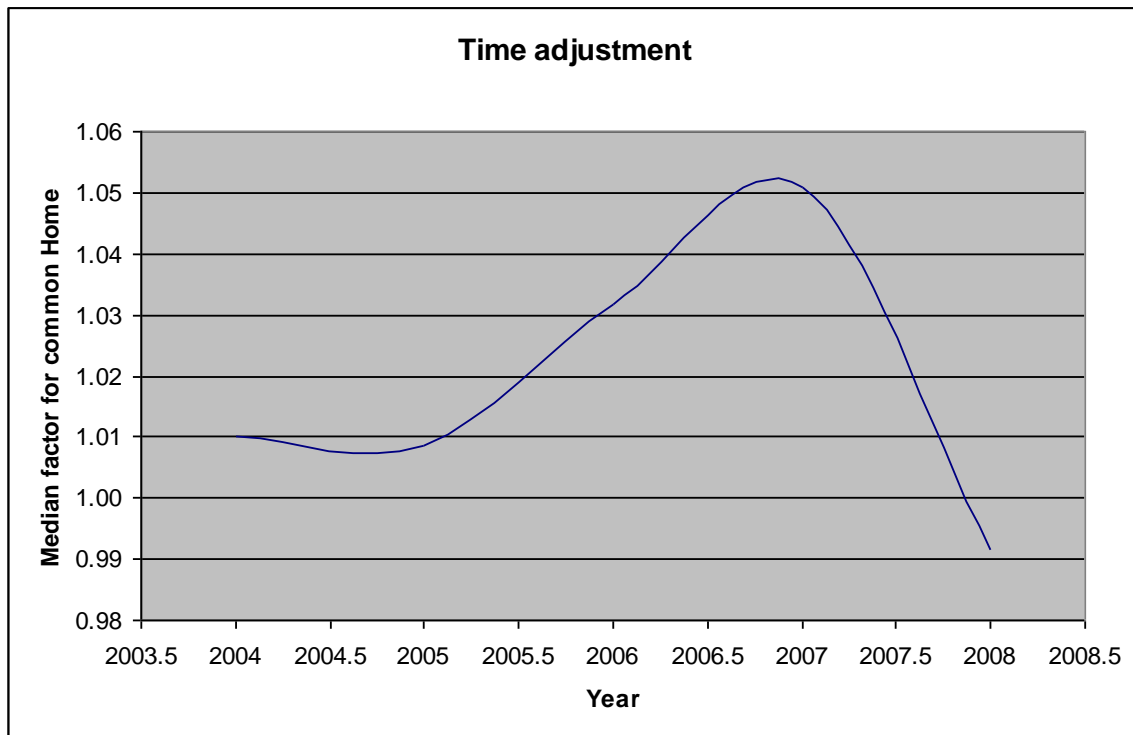
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Review of Residential Parcels

As recommended by the Department of Local Government Finance, Tippecanoe County used only market sales that occurred in 2008, only one calendar year prior to the relevant assessment date, whenever possible. In more rural neighborhoods or areas that experienced low sales volume, older sales were used to further substantiate the trending factor for that neighborhood. Vacant land adjustment was based only on 2008 sales. When there was not substantial vacant land sales, time adjusted historical data was not used. The trending factor equation was modified for older sales so that the factor would reflect the more depressed market situation on 3/1/2009 than in previous years. In order to make the results easier to replicate and more transparent, the sale price was not altered for time adjustments. Instead, these older sales were equalized to a lower appraisal level. In more rural townships, the appraisal level (median ratio) is lower because more time adjusted sales had to be used. Even with these adjustments, all statistics are still International Association of Assessing Officers compliant.

The amount of time adjustment was determined by comparing the median trending factor of a typical type of common home that occurred for 2004 to 2008.



Time adjustments were derived using 178 sales of C grade (C-1 through C+2) homes in average condition, built in 1999; the full data set is attached. With few exceptions, the trending factor was not altered unless there were at least five current and/or time adjusted sales available. In unusually small neighborhoods, fewer sales were permissible. When 2008 sales were few but only a small percent of time adjusted historical data was needed, only the most recent, time adjusted sales were used.

Previously many neighborhoods were trended blindly; a factor was derived from data without necessarily confirming that the neighborhood was

geographically sound unless there were statistical issues. This was the first year that we created a digital record of neighborhood descriptions, see attached. Although the list is not comprehensive, it was very useful for consolidating neighborhoods. Neighborhoods that could not easily be geographically defined were combined with qualitatively similar neighborhoods. This resulted in 38 residential neighborhoods consolidated for 3/1/2009.

Residual neighborhoods are still an issue because the replacement cost/market relationship in these areas is the broadest. For 3/1/2008, the residual neighborhoods were stratified into residential and agricultural residuals. For 3/1/2009, the residential residuals were further stratified to separate manufactured homes; most townships now have a manufactured home residual neighborhood. Downtown Lafayette's residential neighborhoods are also geographically large and have a variety of dwelling types. To increase uniformity, high end and multi-family scarifications were created for the downtown area.

Purdue University

Previously eight scattered neighborhoods composed the majority of housing around Purdue University. Much of Purdue-influenced housing lies east of campus. Southeast campus is predominant retail and multi-family student housing. Northeast campus is predominantly a mix of single family homes, single family rentals and 2/3 unit rental houses. Commercial properties were valued via income capitalization but residential properties in this area were also reworked.

Many of these patchwork neighborhoods consisted of qualitatively similar houses but land pricing, even for identical lots, was erratic. Price/front foot ranged from \$340-\$1250. Since these dwellings were similar in age, grade, size and use, the various land pricings caused trending factors for very similar neighborhoods to also fluctuate drastically. From a statistical standpoint, these neighborhoods were decent; high land and low factor produce similar assessed value as low land and high factor. These eight neighborhoods were conceptually impossible for taxpayers to understand; often land values of identical neighboring lots would vary several hundred percent.

There is a group of small, comparatively new houses in the very north east part of campus. They were designated neighborhood 7501 and assigned a \$450/FF base rate. The multi-family dwellings, 520 and 530 classes, were separated to their own neighborhood, 7502. The remaining residential parcels were put into another new neighborhood, 7500. Neighborhoods 7500 and 7502 were assigned an equitable \$1000/FF land value. Similar use properties around Prude University are now in coherent delineations with an equitable land pricing mechanism.

C&I Adjustments

In the commercial and industrial appeal arena, taxpayers and their representatives predominantly submit income-derived assessments as an indication of market value. It is hard to gauge appeal validity and settle income appeals that were originally derived from replacement cost because the methodology and supporting data is very different. A broadly adjusted, depreciated, replacement cost assessment is not necessarily what a typical investor is willing to pay.

We believe that income producing property should be assessed by an income capitalization model. We purchased IncomeWorks software to calculate our assessments.

IncomeWorks produces one value for an income producing facility based on how it functions as an income-producing property (see attached).

Many times there are facilities that sit on multiple parcels. All commercial and industrial properties were first grouped into facilities. This process will preclude issues where a large facility is over valued because extraneous vacant parcels surrounding the facility are often priced as primary commercial land. When surrounding vacant land was not being used to support the primary function of the facility, and could function as a site for another property, it was not included in the facility. Vacant commercial parcels are still reviewed and adjusted based on similar use type vacant land sales.

We developed a data entry user interface to analyze and total the physical attributes from the replacement cost model (see attached screenshot). The area allocated to specific use codes in the Marshall and Swift table are converted to plain English and areas summed for the user. This way, data entry staff did not have to sum building information from various parcels, thus reducing computation errors. The condition, age and grade were used to populate rankings in IncomeWorks. Desirability of location rankings were determined by reviewing GIS aerials, street view maps, pictometry-like images and field reviews if necessary. The use of 3-dimensional maps was key in determining the function and location attributes of a facility.

Some parcels/facilities are devoted to a commercial and/or industrial use but are not easily modeled with an income capitalization model. For example, paved lots rely on an accurate land assessment and the replacement cost of paving for a reasonable assessment. Many rural commercial operations use agricultural/residential pole frame buildings. Many of these small operations, where residential type structures are used for a commercial purpose, were left at cost to reflect their most probable use if they were to sell on the open market. Commercial facilities that did not fit the income model were placed in neighborhoods based on their use. These new delineations were reviewed and subject to ratio study.

Sometimes the income model has to produce one value for many parcels. We made sure that there was only one owner for each facility so there would not be value allocation issues with billing. The entire value of the facility is placed on one key number. The other key numbers in the facility were valued at zero. The physical data was unaltered for these key numbers. We are working with Manatron to implement "economic units" when we convert to a new software system. This would allow us to assign a single value to a group of parcels in the future.

A neighborhood is conceptually a group of parcels that can be reasonably assessed by applying a single factor to the depreciated structure replacement cost to obtain a reasonable estimation of sale price. The neighborhood of a commercial/Industrial parcel is no longer relevant for most facilities because they are not assessed via a replacement cost model. Therefore, the neighborhoods and previous factors were left intact in the legacy system to leave the old model intact for future reference. This model is still reasonable for commercial and industrial parcels that did not fit into the income capitalization model. Sales from both models are included in the ratio study. Replacement cost sales are highlighted for review convenience. When we convert to ProVal, the physical data will move over from the Marshall and Swift based legacy system, but for many parcels the value in the conversion file will come from IncomeWorks. Proval can

track values from several assessment methodologies, where as our legacy system does not.

After all facilities were valued, a ratio study was done to ensure uniformity and accuracy of the new model. The sales were not directly used to adjust values. We used both 2007 and 2008 sales in the commercial and industrial ratio study because we want to include as much data as possible to gauge accuracy.

For 2009 assessments our primary goals were: establish an income capitalization model that commercial and industrial investors/owners could understand, clean up dense residential areas around Purdue University and downtown Lafayette and consolidate extraneous neighborhoods in rural areas. Although we have made great progress this annual adjustment period, we still have ambitious goals. For 2009 we stratified many multi family dwellings to their own neighborhoods. For 2010, per updated annual adjustment rule, we will research residential rent data and value all residential rentals with a geographically appropriate gross rent multiplier. This will complete our efforts to values all income producing property via the income approach. We would like to address high variability in residual areas by developing an automated trending program that can compare all parcels in a residual area to the sales file and pick out the sales that are most qualitatively similar and geographically close. This method should produce more parcel specific values than mass application of a factor derived from a very large pool of sales. We look forward to more uniformed and accurate assessments as we continue to embrace and develop new technology.